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PYGUROSTOMA PASIONENSIS, A CRETACEOUS ECHINOID FROM GUATEMALA

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The species described herein is particularly interesting because it is the first of the genus *Pygurostoma* to be recorded from America. In fact, the genus has heretofore been known only from the genotype, *Pygurostoma morgani* Cotteau and Gauthier (1895, p. 52, pl. 8, figs. 1–5), which was described from Persia and, so far as I know, has not been reported from elsewhere.

Pygurostoma has the characteristic apical system, petaloid areas, and floscelle of the Cassidulidae, to which family it was originally assigned. Lambert and Thiéry (1921, p. 357) classified it in their "tribu Mepygurinae" under the subfamily Nucleolidae, but Mortensen (1948, p. 244) restored it to the Cassidulidae.

Only one, partly decorticated, individual of the new species has thus far come to my notice. It was sent to the American Museum of Natural History by Dr. Barnum Brown, who obtained it from Mr. Claude Smith, Manager of the Chicle Development Company. Thanks are due to Mr. Smith and Dr. Brown for the gift and to Mr. George Buchanan of the Sohio Petroleum Company, Houston, Texas, for permission to publish this description.

Pygurostoma pasionensis, new species

Figure 1

Horizontal outline oval; upper surface elevated, lower surface slightly concave, margin rounded. Apical system slightly in front

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FIG. 1. *Pygurostoma pasionensis*, new species. Top, bottom, and side views of type. Natural size. Photographs by Mr. Nelson W. Shupe.

of the center, having four widely separated genital pores and a large central madreporite. Ambulacral areas petaloid, terminating in a well-defined floscelle near the peristome; petals extending nearly to the margin, open at the distal ends, lanceolate, the anterior petal narrower and straighter-sided than the others; poriferous zones of petals narrow, inner pores circular or oval, outer pores elongated; interporiferous zones much wider than the poriferous, tumid. Peristome farther forward than the apical system, pentagonal, wider than long, with five swollen, nearly equal, oval phyllodes. Periproct inframarginal, not visible from above, oval, longitudinally elongated. Surface covered with small tubercles in small, deep scrobicules.

Length 61 mm.; width 53 mm.; height 30 mm.

Pygurostoma pasionensis has somewhat longer, straighter petals than *P. morgani*. Its peristome, which is a little wider than long, seems to be less nearly equilateral. Its periproct is larger and

more nearly terminal than that of the genotype, though it is not visible from above. It appears to be flush, not set in a groove like that of the genotype, though this appearance may be caused by its partial decortication.

OCCURRENCE: The type, a unique specimen, was found while blasting rocks for the airstrip near the Rio de la Pasion at Santa Amelia, Guatemala.

GEOLOGIC HORIZON: Probably Upper Cretaceous.

TYPE: A.M.N.H. No. 26901. Replicas in the United States National Museum (U.S.N.M. No. 104914) and in the geological department of the Sohio Petroleum Company at Houston, Texas.

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